

SANYO

VPC-HD1A Series



High-definition movies go palm-sized.

XactiHD1A
DIGITAL MOVIE CAMERA



Xacti HD1A

DIGITAL MOVIE CAMERA

- MPEG-4 Recording
- 5.1-Megapixel Stills & HD (High-Definition) Video Clips
- 48 kHz, 16-Bit Stereo Sound
- 2.2-Inch LCD monitor
- 10x Optical Zoom (100x with Digital Zoom)
- Digital Image Stabilizer



SD 4 GB SDHC Memory Card Compatible



High Definition-Compatible High-Resolution Movies

High-Quality, HD-Compatible Images via MPEG-4 Digital Recording

The Xacti HD1A records high-definition (HD) MPEG-4 movies at 1280 x 720 pixels and 30 fps, giving you far higher-quality imaging than by conventional digital video recording. With the superior resolution of HD recording, the Xacti HD1A vividly renders the details of your subject. Recording in the powerful 16:9 widescreen format — close to people's natural angle of vision — the Xacti HD1A captures those unforgettable moments just the way they appear.

N.B. For HD movie playback, an HD-compatible TV is required.



Making HD Movies Possible in a Compact Body

The Xacti HD1A achieves HD quality despite its ultra-compact body (80 x 119 x 36 mm; 210 g, main body only). It's the portable HD digital movie camera you can take anywhere.

2.2-Inch LCD monitor

Newly Created High-Definition Engine

Easy Viewing and Fast Shooting

Newly Developed 5.36-Megapixel CCD for HD Movie Quality

The image-sensing device at the heart of the Xacti HD1A is a newly developed 1/2.5 inch 5.36-megapixel (total) CCD. Once the visual information from the CCD is read, video signals are rapidly transmitted as "4-mixed pixels," making possible 1280 x 720-pixel high-definition movies.

Bright, Highly Efficient 10x Optical Zoom Lens with F3.5 Aperture

f: 6.3 – 63 (38 – 380 mm) F: 3.5 (wide) – 3.5 (telephoto)

In tandem with the 10x digital zoom, the Xacti HD1A's optical zoom provides up to 100x zoom capability. The adjustable 2-speed zoom allows you to tailor the zooming speed to your subject. And a conversion lens is available optionally.

High-Quality Digital Stereo Recording

The Xacti HD1A's superb 48 kHz, 16-bit, 2-channel sound for AAC-LC (MPEG-4 Audio) provides a sense of reality to match the realism of those impressive HD movies. A noise-reduction function, meanwhile, serves to reduce noise caused by wind during shooting. The Xacti HD1A also features a dedicated terminal to which you can attach an external microphone (not included).

Anti-Shake Digital Image Stabilizer

A proprietary SANYO algorithm achieves optimal correction for camera shake, which may occur while you're shooting video clips. The digital image stabilizer operates effectively under any zoom setting, from wide-angle to telephoto. It accurately distinguishes between unintentional camera shake and deliberate camera movement from pans or tilts. It then compensates for camera shake to create more natural shooting results.

SD (640 x 480) Movie Capturing Enables 60 fps Fluid Motion Recording

The Xacti HD1A's CCD and high-definition engine can record images at the rate of 60 frames per second. By doubling the conventional 30 fps frame rate, the Xacti HD1A generates smooth motion shifts.

Image Compensation Technology for Smoother Playback

Video clips recorded at 30 fps can be converted to — and played back at — 60 fps, through the application of SANYO's proprietary image-compensation technology. This way, movies take up less memory than with native 60 fps recording, yet offer comparable playback smoothness.

High-Definition Still and Movie Images Captured Simultaneously

The Xacti HD1A enables simultaneous the shooting of movie clip. Also HD1A enables shooting of 3.8-megapixel HD (2592 x 1944) still images. You'll never need to miss another precious photo opportunity.

Easy Editing

The Xacti HD1A allows you to paste selected video clip together or remove unwanted part easily by it's built-in editing system.



Pasting



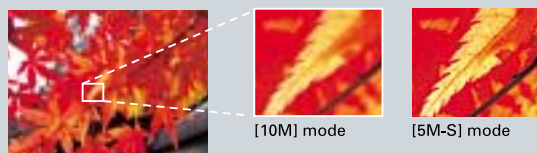
Cutting



High-Performance Digital Camera Functions for Beautiful Still Images

Real-Time Interpolation for 10-Megapixel Recording

SANYO's original algorithm uses a pixel-interpolation filter to convert the CCD's 5.1 effective megapixels to the recorded equivalent of 10 megapixels. This filter enables fine-grained A3-sized printouts of detailed images. You can even enlarge part of an image without sacrificing image fidelity.



Versatile Manual Mode Enables Full-Fledged Shooting

The following settings can be manually adjusted according to the shooting situation: Manual focus adjustment (22 settings); aperture adjustment (5 stops); exposure compensation (± 1.8 EV, 0.3 EV steps); shutter speed (16 settings); ND filter On/Off; and image-quality adjustment (for sharpness and color saturation).

Digital Recording for Expanded Possibilities

Easy Playback and Recording with Docking Station

• Connection to TV

The Xacti HD1A enables easy playback of recorded images on a TV screen. It also comes with a remote controller, so you can operate it from a distance. If the HD1A is connected to an HDTV, you can enjoy high-definition images with no loss of image quality.



• Connection to VCR or DVD Recorder

With the Xacti HD1A, back-up copies of recorded content can be made during playback.

• Connection to PC

Along with MPEG-4 digital recording, the Xacti HD1A offers convenient connection to a PC.

Included PC Kit Compatible with USB Storage Class for Easy Editing

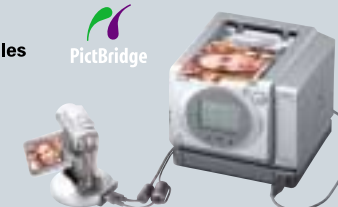
- Ulead® Photo Explorer 8.5 SE Basic (MPEG-4 High-Definition)
- Ulead® DVD MovieFactory 4.0 SE (MPEG-4 High-Definition)
- Motion Director SE 1.1
- QuickTime 7



• PictBridge Compatibility Enables PC-Less Printing



• Faithful Image Reproduction



Digital Photo Printer DVP-P1 (sold separately). Compact enough that you can place it just about anywhere.

Scene Select Shot

With the Xacti HD1A, you can enjoy creating pictures as fun and beautiful as the subjects that inspired you, by simply selecting the mode best suited to your subject.



Sports Mode

Uses a high-speed shutter to capture a fast-moving subject at that key moment.



Portrait Mode

Gives the photographic subject more presence by de-emphasizing the background.



Night View Mode

Clearly shoots both a foregrounded subject and any ambient illumination against a night-time background.



Lamp Mode

Captures fine details under candlelight or lamp light.



Landscape Mode

Brings the entire scene into focus and ensures a sharp image across the whole screen.



Fireworks Mode

Takes vivid pictures of fireworks and other night-time scenes, even if they are far away.



Cosmetic Mode

Enhances the appearance of your subject's skin in close-up photos.



Monochrome Mode

Emphasizes light and shadow to achieve more atmospheric monochrome shots.



Sepia Mode

Changes the color tone for that classic, nostalgic look.

The modes listed to the right can also be used while shooting video clips.

Other Features

- **AE Slide Sequential Shooting**
5 photos at ±0.6EV steps. You can select the image with the most appropriate exposure.
- **Rapid Sequential Shooting**
- **Thin, Compact Lithium-Ion Battery Gives 60 Minutes of Sequential Recording in HD-SHQ mode**
- **Pop-Up Flash with Double the Brightness of Conventional Models**
- **Voice Recorder Function**
- **Zoom-and-Crop Recording (Max, 58x Zoom in [10M] Mode)**
- **Super Macro Shooting, Down to a Minimum Distance of 1 cm**
- **Self Timer (2 Seconds/10 Seconds) Lets You Take Photos of Yourself, and Enables Shake-Free Night Shots**
- **5 Point AF or Spot Focus for Still Images; Continuous Area AF for Video Clips**
- **Talking Navigation Guide for First-Time Users**
- **Multi-Language Graphical User Control**
German, English, Spanish, French, Italian, Dutch, Russian, Japanese, Korean, Traditional or Simplified Chinese



Optional accessories



Further details regarding this product can be accessed at <http://www.sanyo-dsc.com/english/>

Caution: please consult the instruction manual to ensure safe and proper operation of the product.

Distributed by:

Specifications	
Effective pixel count	Approx. 5.1 megapixels
CCD	1/2.5 inch, 5,36-megapixel CCD (total)
Recording media	SD memory card
Recording file formats	Still: JPEG, DCF*1, DPOF*2, Exif Ver 2.2*3, Video clip: ISO standard MPEG-4, Audio: AAC (48 kHz, 16 bit, 2 ch.)
Lens	f = 6.3 - 63 mm (38 - 380 mm on a 35 mm camera), 10x optical zoom lens, Open F: 3.5 (W) - 3.5 (T), AF: 9 groups, 12 lenses, built-in ND filter
Photo range	Standard: 10 cm (wide)/1 m (tele) to infinity, Super macro: 1 cm (wide) to 1 m (wide)
Shutter speed	Still: 1/2 ~ 1/2000 sec. (Flash: 1/30 ~ 1/2000 sec., Lamp mode: max. 4 sec.); Sequential shooting: 1/15 ~ 1/2000 sec. (No flash), Video clip: 1/30 ~ 1/10000 sec.
Digital zoom	Shooting: 10x max., Playback: 58x max. ([10M] mode, depending on the resolution)
Focus	Auto (Still: 5-point AF/Spot AF, Video clip: Continuous area AF), Manual (22 steps)
Exposure Control	Program AE/Shutter speed priority AE/Aperture priority AE/Manual
Program AE	Auto/Sports/Portrait/Landscape/Night View/Fireworks/Lamp*4
Filter function	Standard/Cosmetic/Monochrome/Sepia
Photometry	Multi-section measuring, Center-weighted measuring, Spot measuring
Exposure correction	±1.8 EV (in 0.3 EV steps)
Flicker reduction	Yes
Sensitivity	Still: Auto (ISO 50-200), Manual (ISO 50/100/200/400), Video clip: Auto (ISO 200-800), Manual (ISO 200/400/800/1600)
Self timer	2 sec./10 sec.
White balance	Auto: Full auto TTL, Manual: Sunny/Cloudy/Fluorescent/Incandescent/Sampling
Flash	Auto/Forced/Off/Red-eye reduction (Slow synchro mode possible in Night View mode)
Audio	Microphone: Built-in stereo, Speaker: Built-in monaural (L/R mixed output)
Monitor	2.2-inch a-Si Display (150,000 pixels) (Coverage 100%, 7-level brightness), 285° rotation
Interface	AV output (NTSC/PAL): Video (Component, Composite, S-video); Audio (Stereo sound) USB 2.0 in high-speed mode (interfacing via Docking station or connecting adapter)
Power source	Lithium-ion battery (DB-L40, included), AC adaptor (VAR-G8, included)
Approx. battery life *5	Still ([5M-S] mode): CIPA standard*6, 170 stills; Video clip recording (HD-SHQ mode): 75 min. Continuous playback*7: 220 min
Dimensions	80 (W) x 119 (H) x 36 (D) mm (excluding protrusions), 204 cc
Weight	Approx. 210 g (main unit only), Approx. 235 g (including battery and SD card)
Included accessories	SANYO Software Pack 7.7 CD-ROM, Docking station, Cable adaptor, Component video cable, USB interface cable, S-AV interface cable, Microphone connection cable and core clip, Lithium-ion battery, AC adaptor (100 - 240 V) and power cord, Soft case, Hand strap, Lens cap, Remote controller and lithium battery (CR2025), Safety manual, Quick guide

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- *1 DCF is the abbreviation for Design rule for Camera File system, established by the Japan Engineering Information Technology Association (JEITA).
- *2 The DPOF (Digital Print Order Format) is a format for recording on storage media information such as the number of frames and copies desired for printing of images taken on the digital camera.
- *3 Exif Ver 2.2 is an industry standard established for file formatting of images from digital cameras.
- *4 For still images, only available in [1.2M] or [0.3M] mode.
- *5 Results may vary according to operating conditions.
- *6 CIPA (Camera & Image Products Association) standard.
- *7 Continuous playback in Slideshow mode.

Photo Capacities and Recording Times

	Mode	Resolution	SD memory card capacity			
			512 MB	1 GB	2 GB	4 GB
Video clips	HD-SHQ	1280 x 720, 30 fps, 9 Mbps	7 min. 17 sec.	14 min. 22 sec.	28 min. 46 sec.	57 min. 34 sec.
	HD-HQ	1280 x 720, 30 fps, 6 Mbps	10 min. 49 sec.	21 min. 20 sec.	42 min. 42 sec.	1 hr. 25 min.
	TV-HR	640 x 480, 60 fps, 6 Mbps	10 min. 49 sec.	21 min. 20 sec.	42 min. 42 sec.	1 hr. 25 min.
	TV-SHQ	640 x 480, 30 fps, 3 Mbps	20 min. 59 sec.	41 min. 23 sec.	1 hr. 22 min.	2 hr. 45 min.
	TV-HQ	640 x 480, 30 fps, 2 Mbps	30 min. 34 sec.	1 hr.	2 hr.	4 hr. 1 min.
	Web-SHQ	320 x 240, 30 fps	1 hr. 20 min.	2 hr. 38 min.	5 hr. 17 min.	10 hr. 36 min.
	Web-HQ	320 x 240, 15 fps	1 hr. 56 min.	3 hr. 49 min.	7 hr. 39 min.	15 hr. 18 min.
	Sound only		8 hr. 31 min.	16 hr. 49 min.	33 hr. 40 min.	67 hr. 23 min.
Still images	10M	3680 x 2760	151	297	596	1,190
	5M-H	2592 x 1944 (low-compression)	202	399	795	1,590
	5M-S	2592 x 1944 (standard-compression)	302	595	1,190	2,380
	3.8M (16:9)	2592 x 1464	483	953	1,870	3,760
	2M	1600 x 1200	766	1,510	2,950	5,900
	1.2M	1280 x 960	1,200	2,380	4,770	9,540
	0.3M	640 x 480	3,920	7,740	15,500	31,000

- Available video recording time is shown when a re-formatted card is inserted.
- In WEB-HQ mode, the maximum sequential shooting time is 7 hours.
- The actual frame rates for this model are 59.94 fps at 60 fps, 29.97 fps at 30 fps, and 14.985 fps at 15 fps.
- The maximum sequential recording time for sound only is 13 hours.
- Photo capacities and recording times are approximations only, and may vary according to the type and manufacturer of the memory card, the subject and the shooting situation.
- Continuous movie recording times per clip may vary depending on the resolution used, the subject, and the type, capacity and features of the memory card. Continuous shooting may last only a few seconds, especially when using a low-speed SD card in HD-SHQ, HD-HQ, or TV-HR mode.



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SMD103